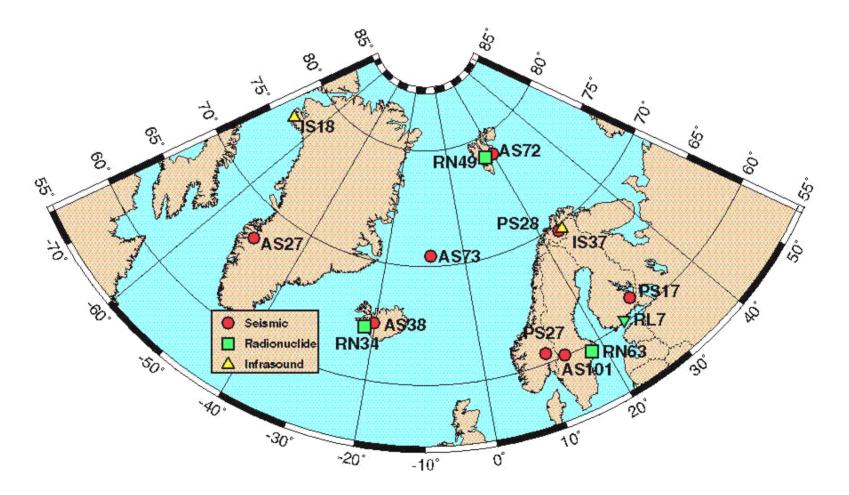
NORSAR's DATA CENTER

Johannes Schweitzer

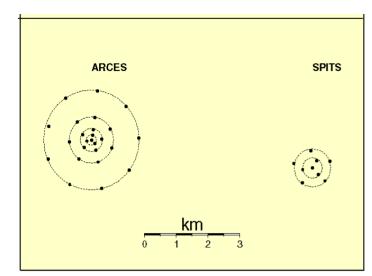
FDSN Meeting, Potsdam, September 2004

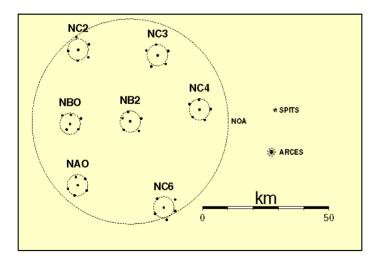


Nordic IMS stations









Norway operates three IMS Seismic Arrays.

An array is a group of seismometers with a certain geometry.

Number of sites and instruments are:

AS72 – 9 sites, 12 instruments (SPITS, Spitsbergen)

PS28 – 25 sites, 36 instruments (ARCES)

PS27 – 42 sites, 63 instruments (NORSAR)

The total diameter of the arrays are:

AS72 – 1 km

PS28 – 3 km

PS27 – 60 km

AS72 represents minimum the requirements for size of an IMS seismic array.

PS27 is the largest seismic array in the IMS.



Some Pictures From NORSAR's Installations





ARCES array. There are no boreholes. Only small vault to house the equipment.







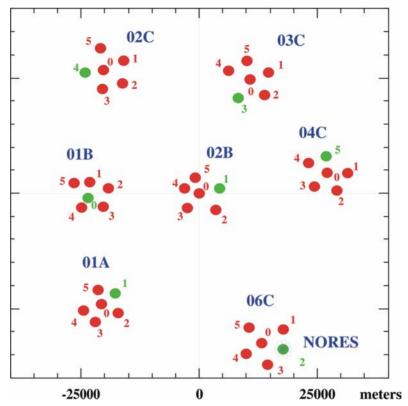




One out of 35 short-period vaults of PS27. Upper left is the locked lid. Upper right is GPS antenna (however, now on a higher pole), The opened lid show the vault with a zinc tank holding the digitiser and other electronics. Under the zinc tank is a 6 m borehole with the sensor.



NORSAR and NORES



Configuration of the large aperture array NORSAR and the small aperture array NORES. The NORES array is co-located with the NORSAR subarray 06C. The diameter of NORSAR is about 60 km and the diameter of NORES is about 3 km. Each seismometer site is marked with a circle. The present NORSAR array has 42 sites, whereas the NORES array has 25 sites. The NORSAR array has logically seven subarrays, each with six vertical seismometers. In addition, one site in each subarray (marked in green) has one three-component broadband seismometer. The geometry of NORES is identical to the geometry of ARCES shown in Fig. 9.1. The center seismometer of the NORSAR subarray 02B has the geographic coordinates 61.03972°N, 11.21475°E. The center seismometer of NORES has the geographic coordinates 60.73527°N, 11.54143°E.



Broad Band Instruments

ARCES Array JMIC 3C NORSAR Array 1 CMG-3T
1 STS-2
6 KS 54000
1 CMG-3T
6 Güralp CMG-3TB

SPITS Array



NORSAR DATA CENTER (NDC)

